## Combining peas - a sustainable and regional

source of protein!

1 Seed coat

2 Embryo shoot

3 Cotyledon (storage body)

**Different forms of cultivation** 

Monoculture and

mixed cropping

possible



2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21





53 % carbohydrates

24 % crude protein

2 % crude fat

18 % fiber

Breeding - the key objectives

Standing ability

protein content

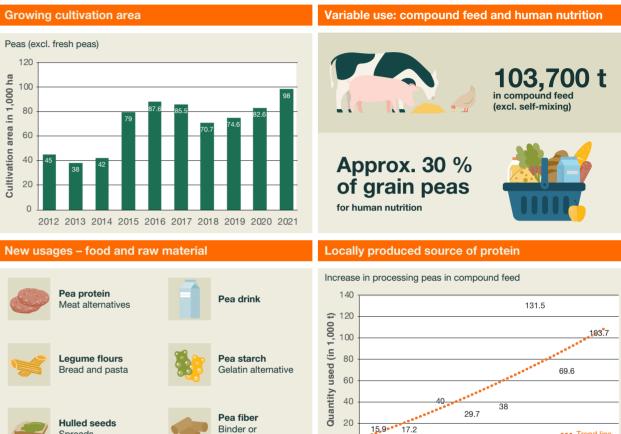
and composition

High grain

Quality:

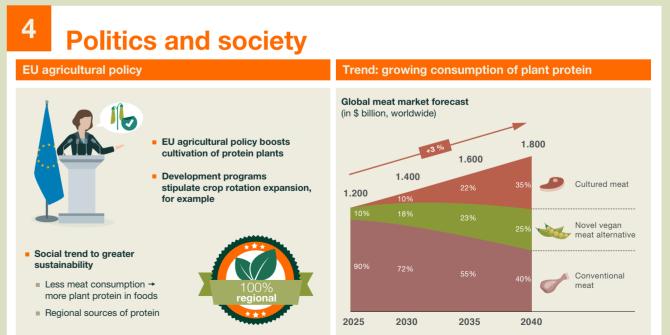
## Combining pea Winter wheat Pea with high crop rotation value - potential extra yield of up Winter barley to 10 dt/ha for succeeding crop Caution: Ensure a cultvation break of 6-7 years Alternation of spring and winter crops Advantage in regions with high

proportions of cereals



animal feed

**Increasing importance** 



Grain corn

Winter rye

Winter wheat

<sup>1)</sup> Combining Peas/ Short profile (own presentation based on the "Beschreibende Sortenliste", 2021 Descriptive Variety List); Structure of a pea seedling ("Inhaltsstoffe", Emsland Group); Different forms of cultivation (own presentation based on multiplication areas from the "Beschreibende Sortenliste", 2021)
2) Advantages of growing peas/ Expansion of the crop rotation (preceding crop value according to UFOP "Praxisinformationen" 2016; crop rotation example modified and based on "Erbsen und Ackerbohne anbauen und verwerten", BLE 2021)
3) Increasing importance/ Growing cultivation area (own presentation based on "Horbstoffeinsatz zur Mischfutterherstellung in Deutschland", destatis 2021; own estimate by KWS (2022); New usages – food and raw material (own presentation based on "Erbsen- und Ackerbohnen, Einsatzmöglichkeiten in der menschlichen Ermährung", DemoNet Erbse Bohne 2021; Decally produced source of protein (own presentation based on the "Struktur der Mischfutterhersteller", destatis 2021)
4) Politics and society/ Trend: growing consumption of plant protein (Übersetzt nach AT Kearney: How will cultured meat and meat alternatives disrupt the agricultural and food industry, 2019)